## **ABSTRACT**

A method for establishing an encrypted communication channel between a first apparatus and a second apparatus by using a session management apparatus-is-disclosed. The method includes the steps of: establishing a first encrypted communication channel between the session management apparatus and the first apparatus by performing mutual authentication between the session management apparatus and the first apparatus; establishing a second encrypted communication channel between the session management apparatus and the second apparatus by performing mutual authentication between the session management apparatus and the second apparatus; and exchanging key information between the first apparatus and the second apparatus via the first encrypted communication channel and the second encrypted communication channel so as to establish an encrypted communication channel between the first apparatus.